

What is claimed is:

- Sub B3
1. A method for improving the extinction ratio of a grouping of polarization maintaining (PM) fibers comprising:
 - providing a plurality of PM fibers, said PM fibers each having corresponding principal axes;
 - disposing said plurality of PM fibers together as a grouping, said grouping having corresponding secondary axes; and
 - aligning each said plurality of PM fibers such that said corresponding principal axes of each said plurality of said PM fiber and said secondary axes of said grouping intersect at a predetermined angle.
 2. The method of claim 1, wherein at least one of said predetermined angles is approximately 0°.
 3. The method of claim 1, wherein at least one of said predetermined angles is approximately 90°.
 4. The method of claim 1, wherein said PM fiber comprises a PANDA fiber.
 5. The method of claim 1, wherein said PM fiber comprises a TIGER fiber.
 6. The method of claim 1, wherein said PM fiber comprises a BOWTIE fiber.
 7. The method of claim 1, wherein said PM fiber comprises a PM fiber using SAP.

- Sub B4 1
8. A apparatus which improves the extinction ratio of a grouping of polarization maintaining (PM) fibers comprising:

a plurality of PM fibers, said PM fibers each having corresponding principal axes;

5 said plurality of PM fibers disposed together as a grouping, said grouping having corresponding secondary axes; and

whereby each said plurality of PM fibers is aligned such that said corresponding principal axes of each said plurality of said PM fiber and said secondary axes of said grouping intersect at a predetermined angle.

- Sub B5 6
9. The method of claim 8, wherein at least one of said predetermined angles is approximately 0°.

10. The method of claim 8, wherein at least one of said predetermined angles is approximately 90°.

11. The method of claim 8, wherein said PM fiber comprises a PANDA fiber.

- 15 12. The method of claim 8, wherein said PM fiber comprises a TIGER fiber.

- Sub B6 13. The method of claim 8, wherein said PM fiber comprises a BOWTIE fiber.

14. The method of claim 8, wherein said PM fiber comprises a PM fiber using SAP.